Product Guide

TS34-1800A

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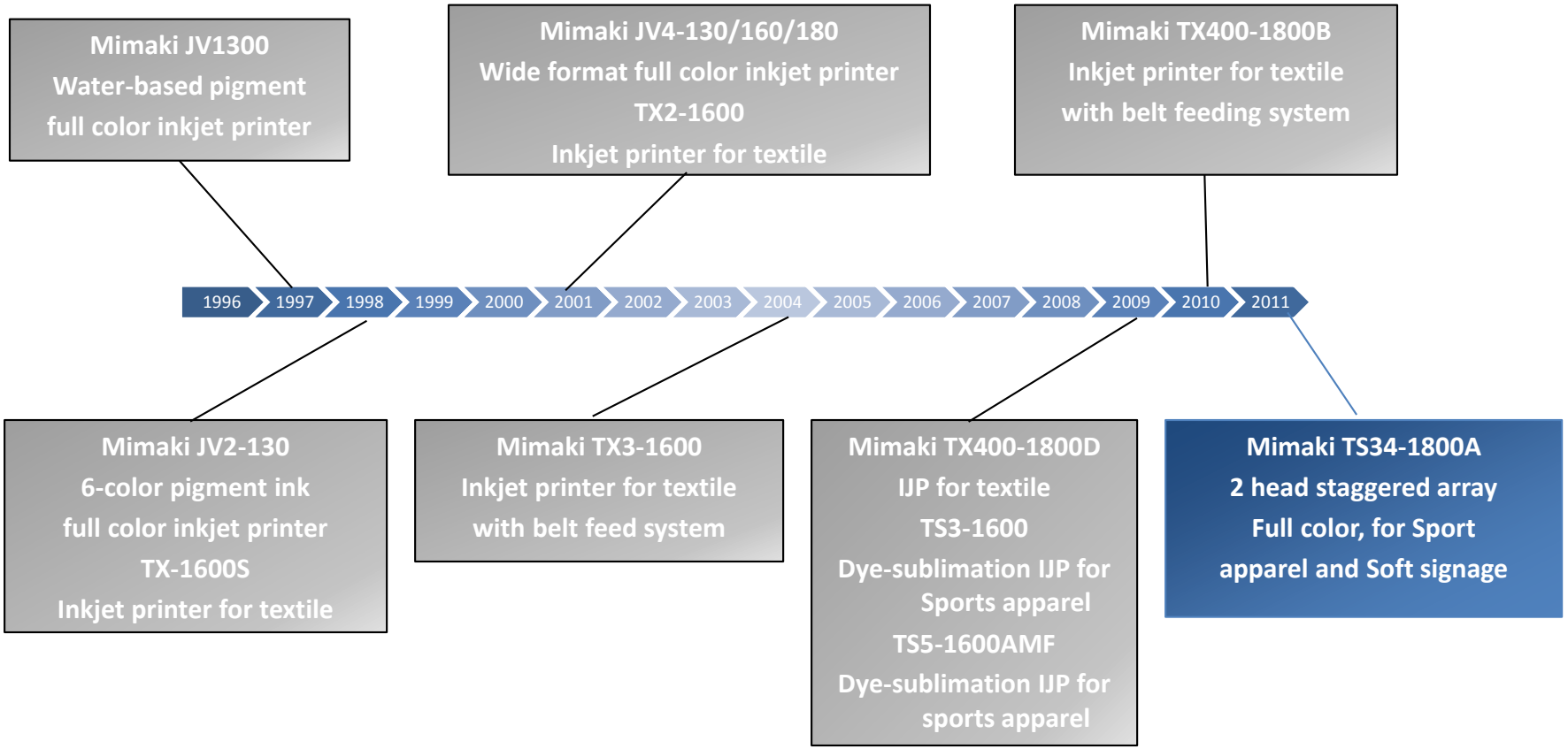
History of Mimaki Aqueous Inkjet Printer



Based on the technology we have cultivated, we created the TS34-1800A.

Features

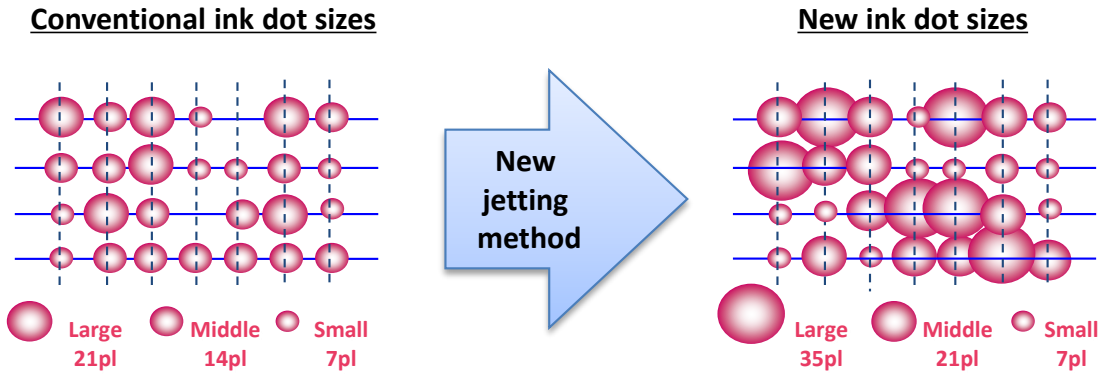
- **High density & high speed modes delivers high quality printing results**
  - High speed printing at 45,9m²/h
  - Maximum ink drop size of 35pl
- **UISS ensures longer continuous printing**
  - UISS (Uninterrupted Ink Supply System) remarkably lessens the frequency of ink cartridge replacement
  - Improves the up time in the production process
- **Smaller footprint compared with other high-speed printers**
- **Sb53 ink (2L ink pack)**
  - Generates less smoke, still high density and high color brightness

Features

Newly Developed Print Head

- Direction of ink jetting is enhanced. High quality image is achieved.
- The ability of Mimaki TS34 to print up to 1440 dpi and to do variable printing in 3 different dot sizes allows users to print various images with high quality, from highlight to shadow, even in 4 color mode.

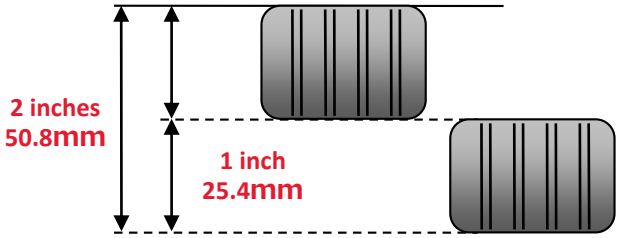
Micro piezo printhead



TS34-1800A

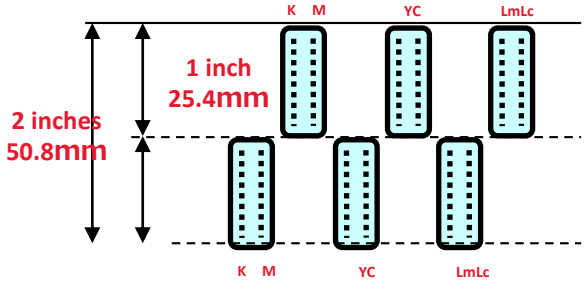
Features

- **High-speed and high image quality printing with a staggered array of 2 print heads**



TS34

TS3



Older generations

TS34-1800A

Features

- **Uninterrupted Ink Supply System (UISS)**
  - Double Cartridge Automatic Change Function
  - Two-cartridge ink supply enables cartridge replacement without stopping the production

Green ON: Ink in use

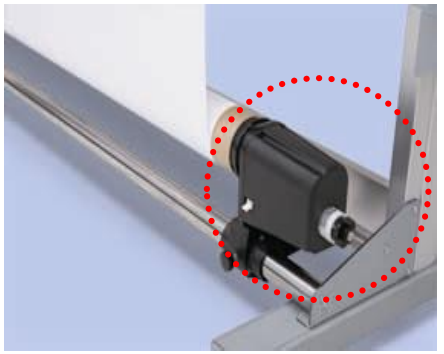
Light OUT: Unused

After ink ends, Red light ON

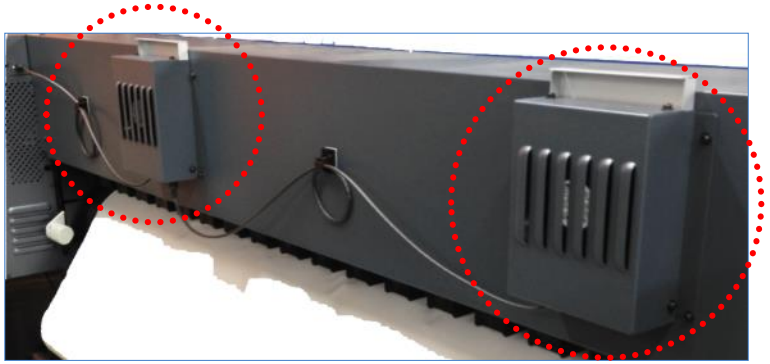
Changes to new cartridge

Standard features

- **Automatic take-up device**
  - Auto take-up device for maintaining the same tension
  - Take-up torque adjustment ability, ensures continuous media take-up up to 25kg / 180mm of the outer diameter



- **Ink mist prevention fans**
  - To ensure stable continuous print operations



Features

Standard in the Combo package.

- **Drying Fan 180**

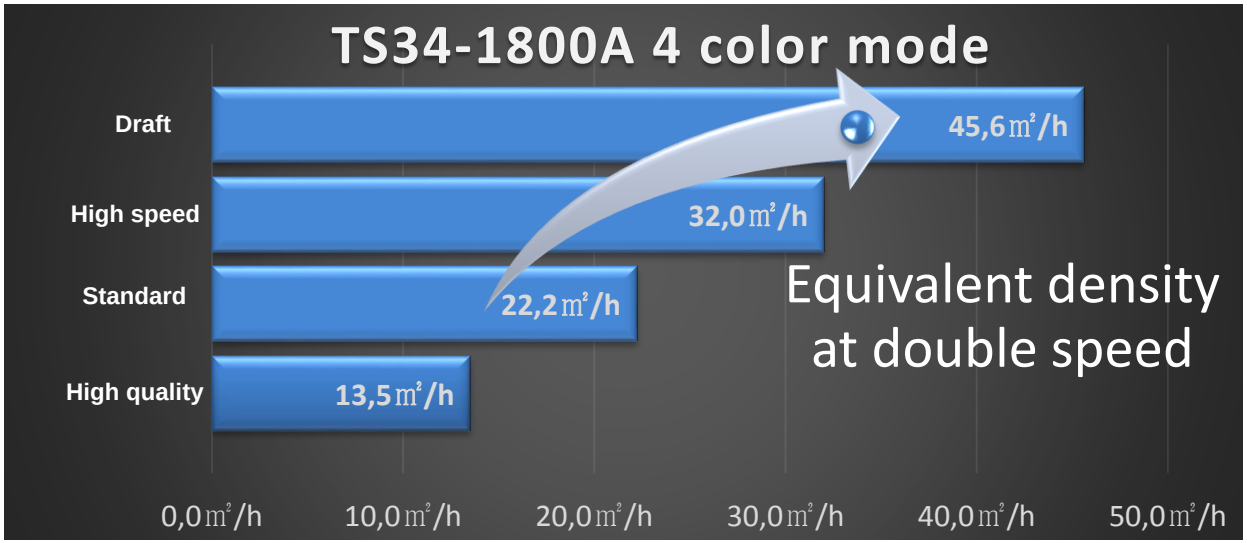
  For an even more streamlined work, a drying fan is available as option. Even at high-speed transfer, the media is dried thoroughly so that it can be wound up immediately.

- **MBIS2 (Mimaki Bulk Ink System)**

  Mimaki's optional MBIS2 uses 2 liter ink containers in combination with Mimaki's UISS (Uninterrupted Ink Supply System) to reduce your environmental footprint even further.

Print Speed with 4 color

- **45.6m²/h is possible, thanks to High density & High speed mode**
- **High-speed printing with higher densities**

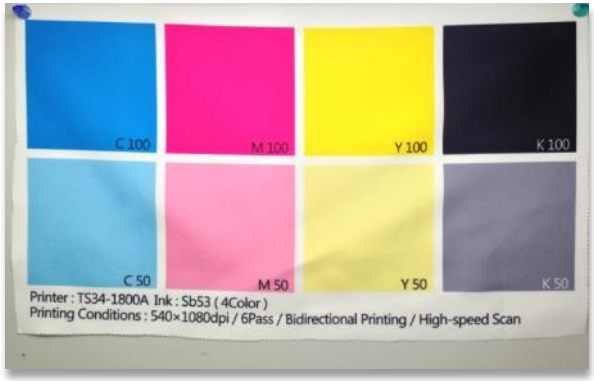


	Draft	High-speed	Standard	High-quality
TS34-1800A, 4 color	540x360dpi,2pass Bi Hi	540x720dpi,4pass Bi Hi	540x1080dpi,6pass Bi Hi	720x1440dpi,8pass Bi Hi
Bi: Bidirectional printing Hi: Print heads move at high speed				

High print density at low resolution

- **New ink jetting method achieves higher densities at higher print speeds with lower resolutions**
  - Equivalent density is obtained at twice the speed
  - Low density with low resolutions are resolved by increasing ink dot size

Print speed: 22,2m²/h



540x1080dpi/ 6Pass/ Bi/ Hi

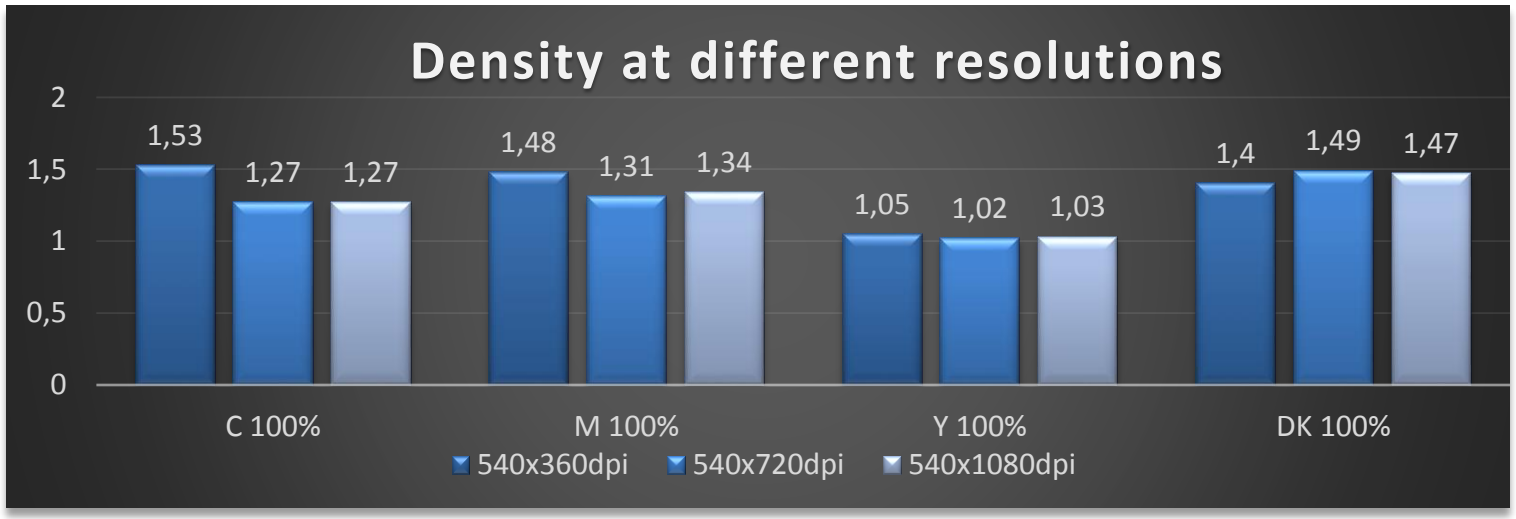
Print speed: 45,6m²/h

540x360dpi/ 2Pass/ Bi/ Hi

	Large Drop	Middle Drop	Small Drop
Conventional Ink volume	21pl	14pl	7pl
Ink volume increased 70%			
	Large Drop	Middle Drop	Small Drop
New Ink volume	35pl	21pl	7pl

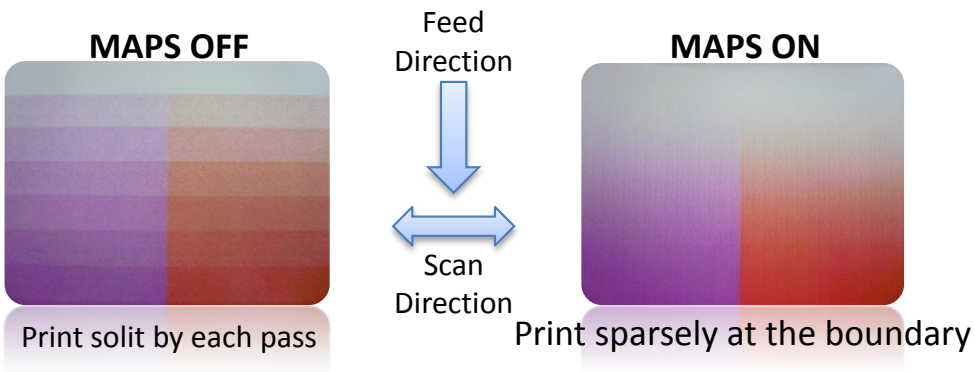
High print density at low resolution

- **Appropriate print density without print quality of conventional printers.**
  - Same print quality as conventional print modes
  - Print density will not decrease at low-resolution
  - Ink consumption will be increased, of higher ink volume



MAPS

- **MAPS, Mimaki Advanced Pass System**
  - MAPS creates stable printing
  - MAPS eliminates banding by ejecting ink sparsely at the boundary of a pass



- **Setting up MAPS!**
  - MAPS setting values: -50 to +50
  - Boundary between each pass is wider by larger setting values(+): White banding would occur.
  - Boundary between each pass is narrower by smaller setting values (-): Print speed is decreased.
  - When MAPS setting value is “-10”, preset printing speed is decreased by 10%

System configuration

PC

Recommended specifications
CPU: Core i5 3.2GHz
MEMORY: 8GB
HDD: 500GB
USB2.0: 4 ports or more
Optical disk drive: DVD-ROM
Windows7 Professional 64bit
Monitor: 1366x768

Connection

USB 2 0
5m(15ft) cable is recommended

Combo pack, including:

RasterLink6

Drying fan 180
MBIS2 (Mimaki Bulk Ink System)

Works also with:

Adobe Illustrator CC

Adobe Photoshop CC

CorelDRAW X6

Options

Sb53 ink

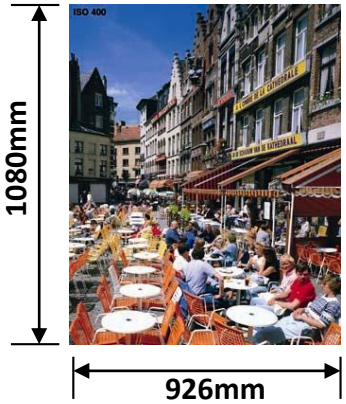
Sb53 ink

- **The Sb53 is available in 400ml cartridges and in 2000ml packs for the MBIS2 system**

Package		Item Number	Color
440cc Cartridge When MBIS2 is not used, ink cartridges should be used		Sb53-K-44-1	Black
		Sb53-DK-44-1	Deep Black
		Sb53-BL-44-1	Blue
		Sb53-M-44-1	Magenta
		Sb53-Y-44-1	Yellow
2L Pack When MBIS2 is used, 2L ink pack should be used Works with the MBIS2 option		Sb53-K-2L-1	Black
		Sb53-DK-2L-1	Deep Black
		Sb53-BL-2L-1	Blue
		Sb53-M-2L-1	Magenta
		Sb53-Y-2L-1	Yellow

Sb53 ink

- Ink cost of printing
- Image Cafeteria(N2)
- Ink cost for 1 print, 1m², in production mode



Ink set	Print mode	Ink volume	440cc Cartridge cost (€ 0,147/1cc)	2L pack cost (€ 0,070/1cc)
Sb53 Ink 4 color	540X360dpi Transferpaper-Tro	4.35cc	€ 0,642	€ 0,304
Sb53 Ink 4 color	540X1080dpi JC2k-Tropical V3 (Polyester)	3.99cc	€ 0,589	€ 0,279

Sb53 ink

- **Two types of black inks**

Ink Type	Advantages	Disadvantages
Sb53K Black	• Less smoke generation during sublimation heat transfer process • Less grainy appearance on low bit image. • Better dry-ability	• Reflection density is low on low bit image
Sb53DK Deep black	• Delivers deeper black (closer to jet-black) • Higher reflection density on low bit image	• Less grainy appearance may be found on low bit image • Smoke generation level is higher than Sb53K

- **Smoke quantity**
  - Sb53 generates less smoke during sublimation transfer process.
  - Sb53 DK ink generates much smoke than other inks.

Sb53
Bl/M/Y/K

Amount of Smoke generation
Sb53 ink
K＜DK

Sb53
Bl/M/Y/DK

Sb53 ink test results

Item	Test method		Class		DK	K	BL	M	Y	LBL	LM
Lightfastnes	JIS L 0842				5	4	3	4	6	3	4
	ISO-105 B02				5	5	3	4	5 and over	3-4	5 and over
Laundry	JIS L 08 44		Color change or fading		4-5	4-5	4-5	4-5	4-5	4-5	4-5
	A-2		Color staining	Cotton	4-5	4-5	4-5	4-5	4-5	5	5
				Silk	4-5	4-5	4-5	4-5	4-5	5	5
Dry Cleaning	JIS L 0860		Color change or fading		5	5	5	5	5	5	5
	A-1		Color staining		4-5	5	4-5	4-5	5	4-5	4-5
	ISO-105 D01		Color change or fading		—	5	5	5	5	5	5
Chlorine water	JIS L 0844 A		Color change or fading		4-5	4-5	4-5	4-5	4-5	4-5	4-5
Sweat	JIS L 0848	Acidity	Color change or fading		5	5	5	5	5	5	5
			Color staining	Cotton	4-5	4-5	4-5	4-5	4-5	5	5
				Silk	4	4-5	4-5	4-5	4-5	5	5
		Alkalinity	Color change or fading		5	5	5	5	5	5	5
			Color staining	Cotton	4-5	4-5	4-5	4-5	4-5	5	5
				Silk	4	4-5	4-5	4-5	4-5	5	5
Water	JIS L 0846		Color change or fading		5	5	5	5	5	5	5
			Color staining	Cotton	4-5	4-5	4-5	4-5	4-5	5	5
				Silk	4	4-5	4-5	4-5	4-5	5	5
Sublimation	JIS L 0854		Color change or fading		41369	5	5	5	5	5	5
			Color staining	Cotton	2	3	3	2	3	4	4-5
				Silk	3	3	2-3	2	2-3	4	4
Rub	JIS L 0849		Dry		4-5	5	4	4	5	5	5
			Mosit		4-5	4-5	4-5	4-5	5	5	5
	ISO-105 X12		Dry		—	4-5	4	4	5	5	5
			Moist		—	5	4-5	4-5	5	5	5

- **Test was performed by:**
  - Nissenken, Quality Evaluation Center
- **Transfer paper:**
  - Transfer paper 51-140(SPC-0511)
  - Imprinted fabric: Polyester 100%
- **Transfer conditions:**
  - 200℃ 60sec
- **Print conditions on transfer paper:**
  - 720dpi 8pass uni-directional 100%
- **Profile:**
  - Ink limit OFF

Applications

- The MIMAKI TS34-1800A expands business opportunities such as soft signage, sports apparel and gear using eco-friendly aqueous ink.

Banners

Flags

Snowboards

Sports uniform

Specification comparison

Maker	MIMAKI	MIMAKI	MIMAKI
Print method	Sublimation transfer	Sublimation transfer	Sublimation transfer
Model	TS34-1800A	JV4-180	TS3-1600
Large sized bottle	MBIS2 (Standard feature)		MBIS2 (Standard feature)
Color variation	4 color	6 color	4 color
Number of printhead	2	6	1
UISS	Applicable for 4 color printing	None	Applicable for 4 color printing
Ink supply system	8 slots Cartridge or Bulk system	12 slots Multi print 2WAY/1WAY	8 slots Cartridge or Bulk system
Maximum set-able media width	1,910mm	1,910mm	1,620mm
Maximum printable width	1,900mm	1,870mm	1,610mm
Standard speed	22m² (4 color)	9.8m² (6 color)	9m² (4 color)
Width	2,840mm	2,410mm	2,538mm
Depth	750mm	730mm	739mm
Height	1,430mm	1205mm	1,424mm
Weight	210kg	158kg	160kg
Note			

TS34-1800A Specifications

Item		Specifications
Print head		On-demand piezo print head 2 print heads and each has 8 nozzle lines, Staggered array
Maximum print width		1,900mm
Print resolution		360, 540, 720, 1440dpi
Head height		2mm/3mm ,3mm/4mm, 4mm/5mm (Setup during the installation)
Ink	Type	Dedicated sublimation transfer ink Sb53 ink
		(With IC chip)
	Color	4 color (BMYK)
	Supply method	8 ink cartridges (440ml each)
		8 ink packs (2L each) by MBIS2
Media	Size	210mm~1,910mm
	Thickness	1.0mm or under
	Weight	25kg or under
	Roll diameter	Φ180mm or under
	Roll inside diameter	2 inches or 3 inches
Media cutter		Y-direction cut by a cutter on the head
Media heater		None
Interface		USB2.0
Power		AC100～120V、AC200～240V
Power consumption		360W or under 1 plug
Operational environment		Temperature：20℃～35℃ Humidity：35～65%Rh (No condensation)
Dimensions WxDxH		2,840(W) x 750(D) x 1,430(H) mm
Weight		210kg

Thank you

TS34-1800A